

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-33 (canceled)

Claim 34 (currently amended) A test circuit for testing an integrated circuit on a wafer, the test circuit formed on the wafer with the integrated circuit, the test circuit comprising:

- a) a ring oscillator circuit;
 - b) a plurality of sub-circuits coupled to the ring oscillator circuit;
- and
- c) a control circuit to selectively couple the sub-circuits to the ring oscillator circuit;
 - d) an antenna adapted to receive a signal;
 - e) a power supply circuit coupled to the antenna and adapted to provide power to the test circuit; and
 - f) a transmitter circuit coupled to the ring oscillator and the antenna and adapted to transmit a test result signal.
- and wherein the test circuit conducts a separate test of the integrated circuit for each sub-circuit selected by the control circuit.

Claim 35 (original) The test circuit of claim 34 wherein each test conducted by the test circuit is a parametric test.

Claim 36 (original) The test circuit of claim 35 wherein the sub-circuits when coupled to the ring oscillator circuit change the frequency of oscillation of the ring oscillator circuit.

Claim 37 (original) The test circuit of claim 36 wherein at least one sub-circuit comprises a capacitive load to change the frequency of oscillation of the ring oscillator circuit.

Claim 38 (original) The test circuit of claim 37 wherein at least one sub-circuit comprises a capacitive load and a resistive load to change the frequency of oscillation of the ring oscillator circuit.

Claim 39 (original) The test circuit of claim 38 wherein at least one sub-circuit comprises a delay element to change the frequency of oscillation of the ring oscillator circuit.

Claim 40 (original) The test circuit of claim 37 wherein the capacitive load comprises at least one capacitor.

Claim 41 (original) The test circuit of claim 38 wherein the capacitive load comprises at least one capacitor and the resistive load comprises at least one resistor.

Claim 42 (original) The test circuit of claim 39 wherein the delay element comprises at least one inverter.

Claim 43 (original) The test circuit of claim 42 wherein each inverter is a standard CMOS inverter.

Claim 44 (original) The test circuit of claim 34 wherein the control circuit comprises a sequencer to selectively couple the sub-circuits to the ring oscillator circuit to produce a series of test states.

Claim 45 (original) The test circuit of claim 34 wherein the test circuit is formed on the wafer with at least two metallization layers of the integrated circuit.

Claim 46 (original) The apparatus of claim 34 wherein the test circuit is formed on the wafer with at least one metallization layer and one polysilicon layer of the integrated circuit.

Claim 47 (original) The test circuit of claim 34 wherein the test circuit produces a test result signal that is the output of the ring oscillator circuit.

Claim 48 (canceled)

Claim 49 (currently amended) The apparatus of claim 4834, wherein the power supply circuit comprises a voltage rectifier coupled to the antenna, a voltage regulator coupled to the voltage rectifier and an energy storage element coupled to the voltage regulator, wherein the power supply circuit is adapted to provide a plurality of voltage levels to the test circuit.

Claim 50 (currently amended) The apparatus of claim 4834, wherein the control circuit further comprises a second ring oscillator adapted to provide a first clock signal, and a divider coupled to the second ring oscillator and the sequencer and adapted to provide a second clock signal, wherein the second clock signal is provided to the sequencer so that the sequencer can provide a series of test state signals to the ring oscillator and plurality of sub-circuits.

Claim 51 (currently amended) The apparatus of claim 4834, wherein the transmitter circuit comprises a coupler which is coupled to the ring oscillator and the antenna and is adapted to selectively couple the output of the ring oscillator to the antenna for transmission of the test result signal.

Claim 52 (original) The test circuit of claim 51 wherein the coupler capacitively couples the test result signal to the antenna.

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Claim 53 (original) The test circuit of claim 51 wherein the coupler modulates the impedance of the antenna to transmit the test result signal.

54-72 (canceled)